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State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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April 4, 2002

TO: Internal File

THRU: Wayne Western, Team Lead *WHW*

FROM: *WB* Priscilla W. Burton, Senior Reclamation Specialist/Soils

RE: Lion Deck Modified Reclamation Plan, Plateau Mining Corporation, Star Point Mine C/007/006 AM02B

SUMMARY:

In a letter dated July 14, 2000, the Division requested that Plateau Mining Corporation provide greater accuracy in the cross-sections and maps of the Lion Deck reclamation plan. Specifically, the Division requested that "cross sections should accurately depict the location of the county road, the solid portion of the bench, the extent of disturbed areas and the natural slopes above and below the disturbed areas to show how the design blends into the natural slopes, and detailed designs for drainage restoration and drainage control along the county road." (County Road 290 is a public road used to access the Carbon County communication and relay facilities on Gentry Mountain.)

As mentioned in the letter, much of the fill for the Lion Deck will come from the refuse facilities. Table 542.200a shows that refuse in the main channel is the source of 553,579 cu yds of fill for the Lion Deck and the refuse pile. Since the Lion Deck and Pond #1 will require only 183,515 cu yds of fill, the Division estimates that 300,000 cu yds of main channel refuse will remain to be hauled to the refuse pile.

TECHNICAL ANALYSIS:

RECLAMATION PLAN

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-240.

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Analysis:

Redistribution

Section 542.100, page 500-72, of the submittal indicates that there will be an estimated 1,178,377 cu yds of earth removed and 1,056,914 cu yds of fill placed during reclamation. The difference between the two figures will be offset by the required compaction of the cut material into the fill. Table 542.200a outlines by location the source of cut and fill quantities. The table shows that refuse in the main channel is the source of 553,579 cu yds of fill for the Lion Deck and the refuse pile. The Lion Deck and Pond #1 will require only 183,515 cu yds of fill.

Taking into account a ten percent reduction of volume due to the compaction of the refuse, the Division estimates that 300,000 cu yds of main channel refuse will be hauled to the refuse pile.

The Soil Redistribution Plan (MRP, Section 241, pp 200-21 through 200-25) states that there will be:

- four feet of cover over the Refuse Pile;
- four feet of cover over acid/toxic material and all coal waste used as backfill;
- seventeen inches of substitute soils over all other areas;
- in-place fill materials used as substitute soils wherever possible;
- re-exposed, buried topsoil used;
- disturbance of the borrow area (owned by CPMC and located at SW 1/4, SW 1/4 Section 2, T.15 S. R. 8 E) only after the on site, previously disturbed materials are exhausted as a source of cover.

As described on page 200-23 of Section 240, the Lion Deck portal access road will be reduced in size, but not reclaimed. The road will remain to support the post-mining land use. Out-slopes of the road will be revegetated, however and the portion of the road affected by a landslide will receive a substitute topsoil application and seeding.

Reclamation of the Lion's Deck will consist of backfilling with coal mine waste from the main channel. Coal mine waste will be covered with four feet of cover. Non-toxic and non-acid forming materials will be covered with seventeen inches of cover at a minimum. The Permittee calculates on page 200-24 of the MRP that 55,499 cu yds of substitute topsoil will be required for cover, 36,662 cu yds of which will come from the outslope and 18,837 cu yds of which will have to be found from other areas within the permit area or from the borrow site.

Coal waste will also be utilized as fill in the main channel side slopes (MRP, Section 240, page 200-25). The coal waste will be covered with four feet of cover. To accomplish

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reclamation of the main channel and lower facilities area, the volume of substitute topsoil required is approximately 116,468 cu yds. This material will be found either during reclamation of the area or from the borrow area.

As laid out in Table 233.100 Reclamation Soil Balance for Coal Waste Cover (MRP, Section 233, page 200-19), four feet of substitute topsoil cover for the Lion's Deck and the Main Channel amounts to 135,305 cu yds and will come from the Soil Borrow site – Stage 1.

Findings:

The soils redistribution information provided in the Mining and Reclamation Plan has not changed with this submittal and remains adequate for the purposes of the Regulations.

STABILIZATION OF SURFACE AREAS

Regulatory Reference: 30 CFR Sec. 817.95; R645-301-244.

Analysis:

All fill material will be compacted to at least 85% maximum Proctor density in lifts of twelve inches (MRP, Section 542.200, page 500-77). Compaction will be accomplished using repeated passes of rubber-tired equipment, rollers, and other appropriate equipment.

Regraded surfaces will be gouged, scarified or ripped on the contour prior to replacement of topsoil (MRP, Section 244, p 200-26). Following substitute topsoil application, mulch with a high organic matter content (2 tons/acre) will be incorporated by either deep gouging or by plowing along the contour (MRP, Section 244 and Section 542.200, page 500-78). Following seeding, an additional 1.5 to 2 tons/acre of straw mulch will be spread over the site and crimped with a trackhoe bucket or sprayed on with a tackifier.

Findings:

The information provided has not changed with this submittal and fulfills the requirements of the Regulations.

RECOMMENDATIONS:

There are no soils related issues with this submittal.